73

Use with Chapter 4
Section 4.2

Mohs Hardness Scale

Table 4-3 Mohs Hardness Scale		
	Hardness	Hardness of Common Objects
Talc	1 (softest)	
Gypsum	2	fingernail (2.5)
Calcite	3	piece of copper (3.5)
Fluorite	4	iron nail (4.5)
Apatite	5	glass (5.5)
Feldspar	6	steel file (6.5)
Quartz	7	streak plate (7)
Topaz	8	scratches quartz
Corundum	9	scratches topaz
Diamond	10 (hardest)	scratches all common materials

Name _____ Class _____ Date _____

WORKSHEET 10 TEACHING TRANSPARENCY

Use with Chapter 4
Section 4.2

Mohs Hardness Scale

1. What does the property of mineral hardness measure?

2. What is the softest mineral shown, and what is its hardness on the Mohs scale?

3. What is the hardest mineral shown, and what is its hardness on the Mohs scale?

4. Explain how you could estimate the hardness of a mineral that does not appear on the Mohs scale.

5. Which common object will scratch feldspar?

6. Which minerals on the Mohs scale will scratch apatite? Which will apatite scratch?

7. What is the hardness of a mineral that scratches gypsum but cannot scratch calcite? Explain your answer.

Name Date Class

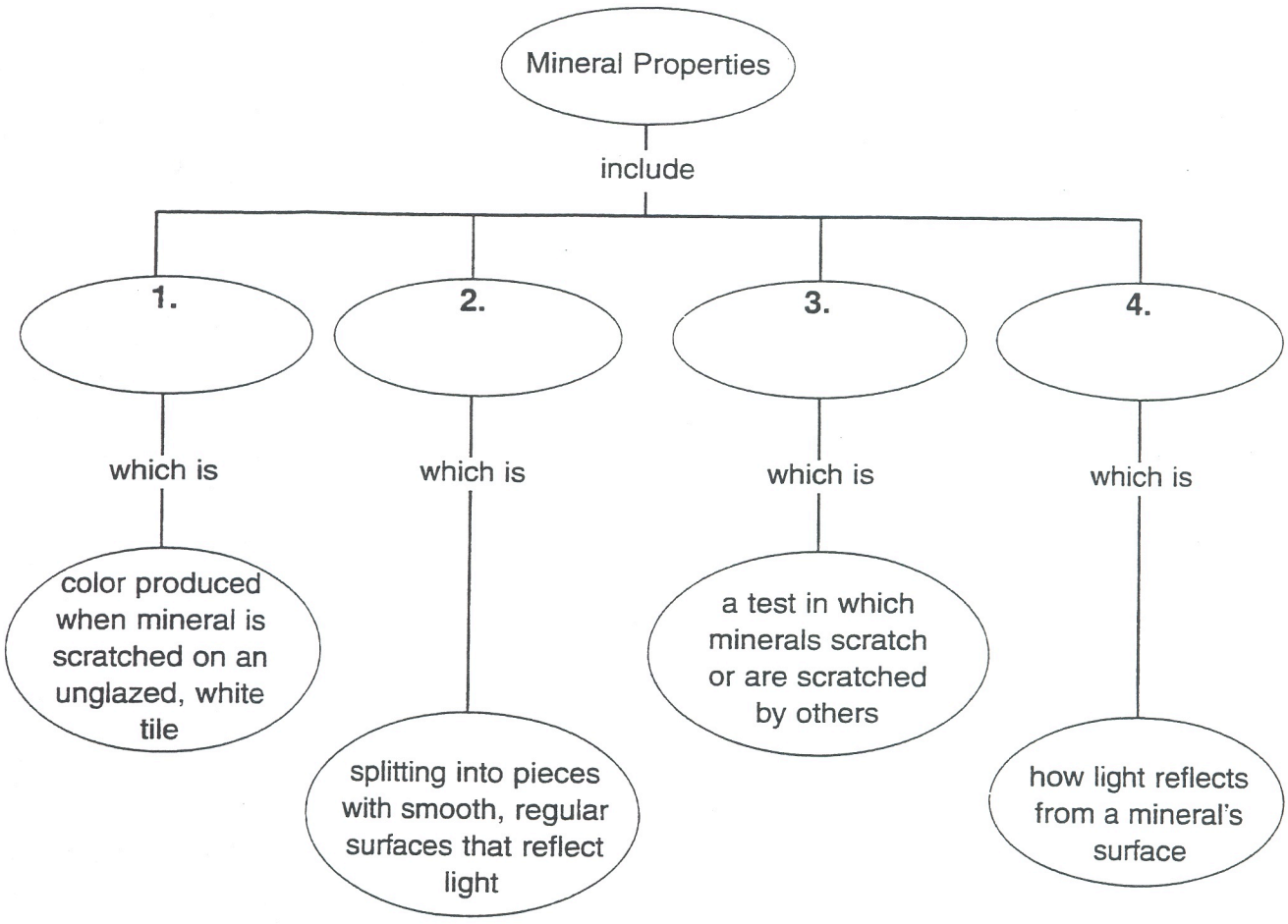
74

Directed Reading for Content Mastery

Overview Minerals

Directions: *Use the following terms to complete the concept map below.*

luster **streak** **cleavage** **hardness**



Meeting Individual Needs

Directions: *Insert the number of the word from the concept map that best matches each of the following sentences.*

_____ **5.** Graphite shines like metal.

_____ **6.** Gold's is yellow, but pyrite's is greenish-black.

_____ **7.** A diamond is harder than quartz.

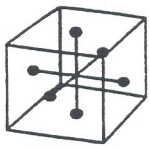
_____ **8.** Mica breaks along smooth, flat planes.

Name _____ Date _____ Class _____

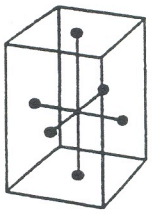
Directed Reading for Content Mastery

Section 1 ▪ Minerals

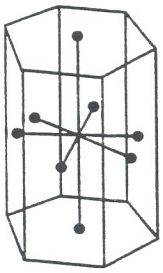
Directions: *Label the crystal systems below as* **triclinic, cubic, tetragonal, hexagonal, orthorhombic,** *or* **monoclinic.**



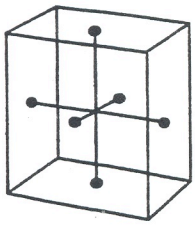
1. _____



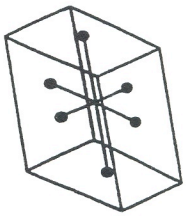
2. _____



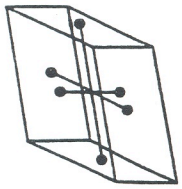
3. _____



4. _____



5. _____



6. _____

Directions: *Circle the term in parentheses that correctly completes each sentence.*

7. When magma cools slowly, the crystals formed are generally (large/small).
8. Crystals also form when minerals dissolve in a liquid that then (evaporates/melts).
9. Minerals that contain silicon, oxygen, and one or more elements are (silicates/halites).
10. Minerals are (organic/inorganic) crystalline solids.

Meeting Individual Needs

Minerals Vocabulary

Luster	
Hardness	
Streak	
Color	
Cleavage	
Fracture	